

AD A094691

LEVEL

(12)

PROPOSAL FOR CONFIGURATION CONTROL FOR
THE ARPA STANDARD VERSION OF
THE UNIX OPERATING SYSTEM.

TECHNICAL REPORT

Sponsored by

Defense Advanced Research Projects Agency (DoD)

ARPA Order No. 4031

Monitored by Naval Electronic Systems Command

Under Contract No. N00039-80-K-0649

April 1, 1980 - February 28, 1982

DTIC
ELECTE
FEB 4 1981

DBC FILE COPY

The views and conclusions contained in this document
are those of the authors and should not be interpreted
as representing the official policies, either expressed
or implied, of the Defense Advanced Research Projects
Agency or the U.S. Government.

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

81 2 2 218

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. AC94691	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) VAX UNIX SYSTEM SUPPORT		5. TYPE OF REPORT & PERIOD COVERED Technical Report
		6. PERFORMING ORG. REPORT NUMBER ADB-88-700
7. AUTHOR(s) R. S. Fabry		8. CONTRACT OR GRANT NUMBER(s) N00039-80-K-0649 ✓
9. PERFORMING ORGANIZATION NAME AND ADDRESS Electronics Research Laboratory University of California Berkeley, California 94720		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Advanced Research Projects Agency 1400 Wilson Boulevard Arlington, VA 22209		12. REPORT DATE
		13. NUMBER OF PAGES 2
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE NA
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) NA		
18. SUPPLEMENTARY NOTES The view, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 68 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

**Proposal for Configuration Control
for
the ARPA Standard Version
of
the UNIX Operating System
by
Computer Systems Research Group
University of California, Berkeley**

1. Introduction

1.1. The System

The ARPA Standard Version of the UNIX Operating System ("the System") shall consist of the original Western Electric Version 7 UNIX software and documentation as modified and enhanced by the Contractor according to this agreement.

1.2. Designated Sites

ARPA shall designate certain sites to receive the System and the needs of these Designated Sites shall be a major factor in determining the configuration of the System.

1.3. Responsibility for the Configuration

The day to day responsibility for the configuration of the System shall reside with the Contractor and be based on priorities determined jointly with ARPA. The ultimate responsibility for the configuration shall reside with ARPA.

2. Major Design Changes and Enhancements

2.1. Major Changes

Major changes are those which involve enhancements or changes that are essential for successful use of the System by the Designated Sites or that have a major impact on existing programs. These include (but are not limited to) paging, access to large files, interprocess communication, and networking.

2.2. Consultation on Major Changes

Broad consultation with the Designated Sites is essential for ensuring that major changes are made in an appropriate manner. The Contractor shall carry out such consultation by means of circulating Technical Reports and various design documents for comment, by arranging design reviews and other meetings for obtaining feedback about anticipated changes, and by giving full consideration to the views expressed by the Designated Sites.

3. Minor Changes and Enhancements

3.1. Minor Configuration Changes

Minor changes include fixing errors and problems, adding enhancements which are thought to be desirable but which can be safely ignored by users who consider them undesirable, and performance enhancements which have no substantial bad side effects.

Accession For	
NTIS	GRAD <input checked="" type="checkbox"/>
DTIC	TC <input type="checkbox"/>
Unannou	<input type="checkbox"/>
Justification	<input type="checkbox"/>
By _____	
Distribution <input type="checkbox"/>	
Available <input type="checkbox"/>	
Dist <input type="checkbox"/>	
A	

P-1

3.2. Consultation on Minor Changes

Broad advance consultation with the Designated Sites regarding minor changes is generally viewed as counterproductive. None-the-less, minor changes can cause problems. Minor changes may have unforeseen bad side effects. Also, a system can change so frequently that it is difficult for users to adjust to the changes. User feedback concerning minor changes which are considered harmful is encouraged and it is expected that some minor changes will be retracted or revised as a result of such feedback.

4. External Proposals for System Changes

4.1. External Proposal Format

It is expected that the Contractor will receive a number of suggestions for major and minor system changes from other sites. No particular format is required for such proposals, but it is suggested that material which the Contractor would provide for a similar type of change should be used as a guide. Ultimately, the value of the change must be balanced against the work it entails in relation to other priorities. Thus, the quality of the suggestion in terms of documentation, *diff* files, willingness to correct errors, ease of integration into the System, etc., may affect whether or not the change is made.

4.2. Handling of External Proposals

A basic intent of the Contractor is to provide a system which is useful and effective for the Designated Sites. The submission of a proposal for a change by a user may indicate that the user has found a real problem with the System, that there is a documentation problem which kept the user from understanding the System, that the user is approaching his problem in a way which is incompatible with the System, etc. As much as is possible, given the priorities and resources of the project, we shall work with Designated Sites to help them construct well formulated suggestions and we shall try to provide thoughtful responses to thoughtful suggestions.